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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/065,217	09/26/2002	Cyril Gerard Beck	17MY-7239	8185

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EXAMINER

SHEEHAN, JOHN P

ART UNIT	PAPER NUMBER
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1742

DATE MAILED: 03/31/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/065,217

Applicant(s)

BECK ET AL.

Examiner

John P. Sheehan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: .

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1 to 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wood et al. (Wood, US Patent No. 4,810,467, cited by the applicants in the IDS submitted September 26, 2002).

Wood teaches castable and weldable nickel-based alloys for use in gas turbine nozzle applications (column 1, lines 6 to 10) as recited in applicants' claims 1 to 10 and particularly claims 5, 6, 8, 9 and 10. Wood teaches an alloy composition containing the same element components as recited in the instant claims in proportions which, with the exception of the aluminum proportion, overlap the applicants' claimed proportions (column 4, Table 2, the column entitled, "Acceptable Melt Chemistry Range"). It is noted that the applicants' claimed proportions for Co, W, Cb and Ta are exactly the same as Wood's preferred proportions for these elements (column 4, Table 2, the column entitled, "Preferred Melt Chemistry Range"). Regarding the aluminum proportion, the instant claims recite an aluminum proportion of "greater than 1.5% to 2.3% aluminum" (claim 1, lines 2 and 3 and claims 10, line 3) and "about 1.75%" (claim

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7, line 2, emphasis added by the Examiner) while Wood teaches an aluminum content of 0.5 to 1.5% (column 4, Table 2, the column entitled, "Acceptable Melt Chemistry Range"). Wood teaches that the strength of the alloy is dependent on the amount of gamma prime forming elements (Al+Ti+Ta+Cb) present in the alloy (column 3, lines 25 to 30) and that to have the necessary strength the alloy should contain about 28 volume percent the gamma phase (column 3, lines 35 to 40) which gamma content is encompassed by applicants' claim 4.

Wood and the claimed invention differ in that Wood does not teach all the exact same proportions, teaches a slightly higher Al content and does not teach the process recited in applicants' claim 3.

However, one of ordinary skill in the art at the time the invention was made would have considered the invention to have been obvious because Wood's alloys, as explained above, have the same utility, the same phase structure and proportions that with the exception of the Al content are either the same as or overlap the instant claims. With respect to the Al content it is the Examiner's position that applicants' claimed Al proportion of "greater than 1.5%...aluminum" (claim 1) and "about 1.75% aluminum" (claim 7, line 2, emphasis added by the Examiner) closely approximate Wood's upper Al content of 1.5% and are so close that one would have expected Wood's alloys and the claimed alloys to have the same properties, *Titanium Metals v. Banner*, 227 USPQ 773 and MPEP 2144.05.

With respect to the process steps recited in applicants' claim 3, it is the Examiner's position that one of ordinary skill in the art at the time the invention was

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made would have considered the invention to have been obvious because the process limitations recited in the instant product by process claims do not necessarily lend patentability to the claimed product, MPEP 2113.

3. Claims 1 to 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shaw (US Patent No. 4,039,330).

Shaw teaches castable nickel-based alloys for use in gas turbine applications (column 1, lines 5 to 7 and column 7, lines 10 to 15) as recited in applicants' claims 1 to 20 and particularly claims 5, 6, 8, 9, 10, 15, 16 and 18 to 20. Shaw teaches an alloy composition containing the same element components as recited in the instant claims in proportions that overlap the applicants' claimed proportions (column 1, lines 45 to 59). Shaw teaches that the sum of the titanium and aluminum proportions should be from 4 to 6.5% (column 2, lines 11 and 12), which overlaps the instantly claimed aluminum and titanium sum of 2.8 to 4.4 recited in applicants' claims (e.g., claim 1, lines 3 and 4). Shaw teaches that the strength of the alloy is dependent on the co-presence of Al, Ti, Ta and Cb (column 2, lines 4 to 10).

Shaw and the claimed invention differ in that Shaw does not teach all the exact same proportions, does not teach the process steps recited in applicants' claims 3 and 13 and is silent with respect to the presence of the gamma phase recited in claims 4 and 14.

However, one of ordinary skill in the art at the time the invention was made would have considered the invention to have been obvious because Shaw's alloys, as explained above, have the same utility and proportions that overlap the

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instant claims and therefore are considered to establish a prima facie case of obviousness, *In re Malagari*, 182 USPQ 549 and MPEP 2144.05. Further, in view of the fact that Shaw's alloys overlap the instantly claimed, that is, are similar to the instantly claimed alloys, Shaw's alloys would be expected to possess all the same properties as recited in the instant claims including the presence of the gamma phase, *In re Best*, 195 USPQ, 430 and MPEP 2112.01.

"Where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a prima facie case of either anticipation or obviousness has been established, *In re Best*, 195 USPQ 430, 433 (CCPA 1977). 'When the PTO shows a sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not.' *In re Spada*, 15 USPQ2d 655, 1658 (Fed. Cir. 1990). Therefore, the prima facie case can be rebutted by evidence showing that the prior art products do not necessarily possess the characteristics of the claimed product. *In re Best*, 195 USPQ 430, 433 (CCPA 1977)." see MPEP 2112.01.

With respect to the process steps recited in applicants' claims 3 and 13, it is the Examiner's position that one of ordinary skill in the art at the time the invention was made would have considered the invention to have been obvious because the process limitations recited in the instant product by process claims do not necessarily lend patentability to the claimed product, MPEP 2113.

### ***Double Patenting***

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA

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1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claims 1 to 10 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 to 10 of copending Application No. 10/065,225. Although the conflicting claims are not identical, they are not patentably distinct from each other because each of these two sets of claims is directed to a castable weldable nickel based alloy containing the same elements and, with the exception of the Ti proportion, in proportions that overlap. With respect to the Ti proportion the instant claims recite "1. 6% to 2.4% titanium" (see instant claim 1, line 3) while the claims of 10/065,225 recite "about 0.4% to about 1.5% titanium" (See '225, claim 1, lines 3 and 4, emphasis added by the Examiner).

The instant claims and the claims of '225 differ in that these two sets of claims do not recite the exact same proportions for each of the elements and the instant claims recite "1. 6% to 2.4% titanium" while the claims of '225 recite a titanium content of "about 0.4% to about 1.5% titanium" (emphasis added by the Examiner).

However one of ordinary skill in the art at the time the invention was made would have considered the invention to have been obvious because applicants' use of the word "about" in defining the titanium content as "about 0.4% to about 1.5% titanium" (emphasis added by the Examiner) in the claims of '225 reads on titanium contents of

greater than 1.5% and therefore does not distinguish over the titanium content of "1. 6% to 2.4% titanium" recited in the instant claims. In view of this the alloy composition recited in these two sets of claims are considered to overlap and therefore the claims of '225 are considered to establish a prima facie case of obviousness, *In re Malagari*, 182 USPQ 549 and MPEP 2144.05.

Further, even if the claims of '225 were amended to delete the term, "about", with respect to the titanium proportion one of ordinary skill in the art at the time the invention was made would have considered the invention to have been obvious because the titanium proportion in these two sets of claims are so close that one would have expected the alloys claimed in these two sets of claims to have the same properties, *Titanium Metals v. Banner*, 227 USPQ 773 and MPEP 2144.05.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

6. Claims 1 to 10 are directed to an invention not patentably distinct from claims 1 to 10 of commonly assigned application Serial No. 10/065,225. Specifically, although the conflicting claims are not identical, they are not patentably distinct from each other because each of these two sets of claims is directed to a castable weldable nickel based alloy containing the same elements and, with the exception of the Ti proportion, in proportions that overlap. With respect to the Ti proportion the instant claims recite "1. 6% to 2.4% titanium" (see instant claim1, line 3) while the claims of 10/065,225 recite "about 0.4% to about 1.5% titanium" (See '225, claim 1, lines 3 and 4, emphasis added by the Examiner).



The instant claims and the claims of '225 differ in that these two sets of claims do not recite the exact same proportions for each of the elements and the instant claims recite "1. 6% to 2.4% titanium" while the claims of '225 recite a titanium content of "about 0.4% to about 1.5% titanium" (emphasis added by the Examiner).

However one of ordinary skill in the art at the time the invention was made would have considered the invention to have been obvious because applicants' use of the word "about" in defining the titanium content as "about 0.4% to about 1.5% titanium" (emphasis added by the Examiner) in the claims of '225 reads on titanium contents of greater than 1.5% and therefore does not distinguish over the titanium content of "1. 6% to 2.4% titanium" recited in the instant claims. In view of this the alloy composition recited in these two sets of claims are considered to overlap and therefore the claims of '225 are considered to establish a prima facie case of obviousness, *In re Malagari*, 182 USPQ 549 and MPEP 2144.05.

Further, even if the claims of '225 were amended to delete the term, "about", with respect to the titanium proportion one of ordinary skill in the art at the time the invention was made would have considered the invention to have been obvious because the titanium proportion in these two sets of claims are so close that one would have expected the alloys claimed in these two sets of claims to have the same properties, *Titanium Metals v. Banner*, 227 USPQ 773 and MPEP 2144.05.

The U.S. Patent and Trademark Office normally will not institute an interference between applications or a patent and an application of common ownership (see MPEP § 2302). Commonly assigned application Serial No. 10/065,225, discussed above,

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would form the basis for a rejection of the noted claims under 35 U.S.C. 103(a) if the commonly assigned case qualifies as prior art under 35 U.S.C. 102(f) or (g) and the conflicting inventions were not commonly owned at the time the invention in this application was made. In order for the examiner to resolve this issue, the assignee is required under 37 CFR 1.78(c) and 35 U.S.C. 132 to either show that the conflicting inventions were commonly owned at the time the invention in this application was made or to name the prior inventor of the conflicting subject matter. Failure to comply with this requirement will result in a holding of abandonment of the application.

A showing that the inventions were commonly owned at the time the invention in this application was made will preclude a rejection under 35 U.S.C. 103(a) based upon the commonly assigned case as a reference under 35 U.S.C. 102(f) or (g), or 35 U.S.C. 102(e) for applications filed on or after November 29, 1999.

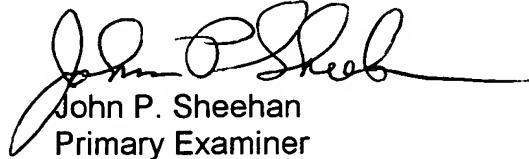
### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John P. Sheehan whose telephone number is (703) 308-3861. The examiner can normally be reached on T-F (6:30-5:00) Second Monday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (703) 308-1146. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0651.



John P. Sheehan  
Primary Examiner  
Art Unit 1742

jps  
March 23, 2003